

Ontario Drinking Water Stewardship Program

Four Year Report (2007-2011)

This report provides an overview of the projects funded by the Ontario Drinking Water Stewardship Program (ODWSP) during its first four years. Established under the Clean Water Act, the ODWSP provides financial assistance for voluntary measures that protect municipal drinking water sources.

In the first three years from 2007 to 2010, the ODWSP provided funds for landowners who took voluntary action to address risks to local water supplies. The Ontario Drinking Water Stewardship Advisory Panel recommended which projects were eligible for funding. They included; well decommissioning and maintenance, septic system inspections and upgrades, runoff and erosion protection, agricultural best management practices, and pollution prevention reviews for small/medium businesses. Projects were funded under three components – Special Projects, Education & Outreach and Early Actions.

In the 2010-2011 funding year, the program was redesigned, in consultation with key stakeholders, to give priority to projects that address drinking water threats identified in assessment reports prepared under the Clean Water Act.

Financial assistance for Early Actions and Early Response activities is available through your local conservation authority:

<http://conservation-ontario.on.ca/find/index.html>

If you are a farmer, visit the Ontario Soil and Crop Improvement Association (OSCIA):

<http://www.ontariosoilcrop.org>

Ontario Drinking Water Stewardship Program Years One to Three

Special Projects

Between 2007 and 2010, the Ministry of the Environment (the ministry) provided funding for projects that supported the principles of the Clean Water Act and:

- complemented the Early Actions component of the ODWSP
- illustrated a new or innovative approach to protecting municipal drinking water sources
- assisted First Nations to protect municipal drinking water or First Nations communal drinking water sources, and/or
- protected municipal drinking water sources outside of source protection areas.

2007/08 Recipients	Special Projects – Project Overviews
Canadian Centre for Pollution Prevention	Conservation authority staff training on the promotion of pollution prevention reviews to small and medium sized businesses in vulnerable areas, and conducting pilot reviews.
Centre for Community Mapping	Development of a standardized system for conservation authorities staff and the public for tracking funding disbursement under ODWSP.
City of Brantford	Installation of fencing and guardrails to protect municipal drinking water source from contamination resulting from dumping.
City of Peterborough	Upgrading a municipal storm water management pond to protect water quality upstream of a municipal water intake.
Conservation Ontario	Staff training on promoting well decommissioning and septic upgrading programs to residents in vulnerable areas.
Essex Region Conservation Authority	Removal of a gasoline fuel storage tank on the Detroit River.

George Morris Centre	Part I of a cost-benefit analysis of drinking water source protection best management practices.
Grand River Conservation Authority	Decommissioning of wells and septic systems within 100 metres of a municipal wellhead.
Killaloe Hagarty Richards	Constructing a building over a municipal wellhead and installing fencing, and a berm as security around the new building.

2007/08 Recipients	Special Projects – Project Overviews
Maitland Valley Conservation Authority	Creation of a nutrient settling pond for filtering contaminants carried by surface water flows over agricultural land.
Marmora and Lake	Installation of catch basins and a storm sewer to divert water away from municipal drinking water source.
Municipality of Killarney	Education and outreach to local residents and tourists on environmentally friendly boating.
Raisin Region Conservation Authority	Creation of a spills response unit in the Raisin - South Nation Source Protection Region.
Saugeen Valley Conservation Authority	Development of a nitrate audit process.
Sault Ste. Marie Region Conservation Authority	Inspection of transformer stations located within the wellhead protection area to determine necessary action for eliminating threat.
Town of Kapuskasing	Well decommissioning and septic upgrades adjacent to municipal wells.

2008/09 Recipients	Special Projects – Project Overviews
Ausable-Bayfield Conservation Authority	Delivery of Early Actions
City of Sudbury	Water treatment facility security upgrades, including fencing and security cameras.
City of Timmins	Decommissioning of municipal wells.
Conservation Halton	Delivery of Early Actions

County of Oxford	Nitrogen release testing on the results of five best management practices.
Credit Valley Conservation Authority	Establish five pollution prevention demonstration sites, at selected small to medium sized businesses, to improve storm water management and reduce or eliminate threats to municipal drinking water sources.
2008/09 Recipients	Special Projects – Project Overviews
George Morris Centre	Watershed modeling research to estimate the effects of source water protection best management practices on nitrate levels in groundwater, used for drinking water.
Grand River Conservation Authority	Support the delivery of Early Actions and development of a business case for further funding.
Grand River Conservation Authority	Utilizing established tools to develop community supported water conservation approaches to reduce municipal water demand in the community of Fergus-Elora.
Individual recipient	Decommissioning of residential septic system and joining to municipal sewer line in a municipal source water protection area.
Lake Simcoe Region Conservation Authority	Delivery of Early Actions
Lakehead Region Conservation Authority	Developing and implementing a campaign to encourage property owners to properly dispose of materials or products that have a potential risk to municipal drinking water sources,
Lower Trent Conservation Authority	Delivery of Early Actions
Madawaska Valley	Study of poor water quality of Kamaniskeg Lake to determine the source and make recommendations on remedial measures.
Municipality of Wawa	Conducting a leak detection survey on the municipal drinking water system.
Nickel District Conservation Authority	Cyanobacteria monitoring program on Ramsay Lake.
Nottawasaga Valley Conservation	Delivery of Early Actions

Authority	
Raisin Region Conservation Authority	Delivery of Early Actions
Raisin Region Conservation Authority	Municipal wellhead security upgrades.
2008/09 Recipients	Special Projects – Project Overviews
Raisin Region Conservation Authority	Creation of a spills response unit in the Ottawa River area, including training for local emergency response teams.
Rideau Valley Conservation Authority	Delivery of Early Actions
Saugeen Valley Conservation Authority	Delivery of Early Actions
Severn Sound Environmental Association	Delivery of Early Actions
Southern First Nations Secretariat	Developing education and outreach materials for eight local First Nations for use at a youth and Elder gathering.
Toronto and Region Conservation Authority	Delivery of Early Actions
Town of Blind River	Decommissioning of three monitoring wells in close proximity to municipal drinking water wells.
Town of Blind River	Municipal well decommissioning.
Town of Smiths Falls	Removal of contaminated soil around site of the new municipal drinking water system intake.
Town of St. Mary's	Water conservation program – installation of low flow toilets and showerheads.

2009/10 Recipients	Special Projects – Project Overviews
City of Brantford	Improving the Holmedale Canal gates to prevent spills in the Grand River from entering the municipal drinking water supply.
City of Timmins	Implementing security measures at the Timmins Water Filtration Plant.
Corporation of the Township of Val Rita-Harty	Decommissioning two producing municipal wells and one dry well.

2009/10 Recipients	Special Projects – Project Overviews
County of Oxford	Replacing an underground diesel fuel storage tank with an above ground tank and containment unit. The fuel tank is near the municipal well and treatment facility and is used as an emergency back-up power source.
Delaware First Nation	Upgrading wells to prevent flooding and contamination of drinking water.
Essex Region Conservation Authority	Demonstration project at a local strip mall located within the first Intake Protection Zone (IPZ -1). The project has two components: 1) upgrading a self service car wash and installing an oil/water separator, suspended solids filtration and polishing filtration equipment, and installing a private septic system. 2) developing signs for the strip mall, media events and mailings, to showcase as a best management practices demonstration site.
Grand River Conservation Authority	Implementing a pilot program on wastewater treatment to reduce the frequency and severity of spills and bypasses from municipal wastewater treatment plants along the Grand River.
Grand River Conservation Authority	Implementing a program to educate waste water treatment plant supervisors and operators from local facilities to help reduce the risk to downstream drinking water.
Individual recipient	Replacing a residential septic system within a vulnerable area around a municipal drinking water intake.
Individual recipient	Upgrading residential septic systems within a vulnerable area around a municipal drinking water intake.
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Individual recipient	Upgrading residential septic systems

	within a vulnerable area around a municipal drinking water intake.
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2009/10 Recipients	Special Projects – Project Overviews
Individual recipient	Upgrading residential septic systems within a vulnerable area around a municipal drinking water intake.
Individual recipient	Upgrading residential septic systems within a vulnerable area around a municipal drinking water intake.
Niagara Peninsula Conservation Authority	Upgrading a municipal siphon structure, to support a proposed agricultural erosion and runoff early actions project near a drinking water intake.
Quinte Conservation	Implementing a program to monitor algae and cyanobacteria on the Bay of Quinte.
The Sir Sanford Fleming College of Applied Arts	Research using floating islands of natural vegetation to reduce drinking water threats in storm water ponds.
Town of Prescott	Decommissioning underground fuel tanks and installing above-ground tanks at a local marina refueling station. This will reduce the risk of leakage and spills into the St. Lawrence River and municipal drinking water intakes.
Town of Shelburne	Providing greater security around municipal wellheads. The new upgrades will include fencing, replacing inadequate locks and doors, and installing security lighting.
Township of Tay	Volunteer fire department training on spills response and using specialized spill response equipment. The funding will also support the purchase of a spills response trailer.

Education and Outreach

Between 2007 and 2010, the ministry provided funding for projects that supported the principles of the Clean Water Act and:

- educated the agricultural community on best management practices for drinking water source protection
- encouraged businesses and industries to develop best management practices for drinking water source protection
- developed strategies to incorporate drinking water source protection into teaching programs, and/or
- developed outreach strategies encouraging local communities to support drinking water source protection initiatives.

2007/08 Recipients	Education and Outreach – Project Overviews
Ausable Bayfield Conservation Authority on behalf of Source Protection Region	Education and outreach to landowners, preparing and distributing materials related to the project, organizing meetings and demonstrations on best management practices for drinking water source protection.
Canadian Environmental Law Association	Support environmental non-government organizations' participation in discussions on the Clean Water Act and the source protection planning process.
City of Hamilton	Print materials (signs, brochures), one-on-one site visits, and five open houses.
Conservation Ontario	Communications toolkit on the Clean Water Act, drinking water source protection and best management practices.
Conservation Ontario	Funding for environmental non-government organizations' participation in annual A.D. Latonnell Symposium.
Conservation Ontario	1500 French communications toolkits for conservation authorities to use in their education and outreach initiatives.
Essex Region Conservation Authority	Direct mail to 15,000 properties, one-on-one visits to property owners, and

	seven open houses.
Grand River Conservation Authority on behalf of Lake Erie Source Protection Region	One-on-one contact with property owners, hosting 20 workshops, education and outreach materials.
Conservation Halton	Splash Day, a water – themed family event held at conservation grounds on June 7, 2008

2007/08 Recipients	Education and Outreach – Project Overviews
Lake Simcoe Region Conservation Authority for the South Georgian Bay – Lake Simcoe Source Protection Region	Direct mail to 16,000 households, one-on-one visits with property owners, nine workshops, virtual library.
Lakehead Region Conservation Authority	Direct mail campaign, one-on-one visits with property owners, website upgrades, open house.
Nickel District Conservation Authority	World Water Day Movie Festival, one-on-one visits with property owners, installation of drinking water protection signs for vulnerable areas.
Nottawasaga Valley Conservation Authority	Direct mailing campaign, one-on-one contact with property owners and one workshop.
Ontario Federation of Agriculture	Brochure on source protection targeting farmers, training representatives of the Ontario Soil and Crop Improvement Association on the Clean Water Act, speaking engagements.
Otonabee Region Conservation Authority on behalf of the Trent Conservation Coalition	Direct mail of education and outreach materials, one-on-one visits with property owners, 17 seminars throughout the region.
Pollution Probe	Website tool to support cross-jurisdictional management of the Ottawa River watershed.
Raisin Region Conservation Authority on behalf of Raisin-South Nation Source Protection Region	Direct mail of education and outreach materials, one-on-one visits with property owners, watershed tour, best management practices workshops, barriers survey.
Regional Municipality of Durham	One-on-one site visits, community forums, general public workshops,

	media campaign.
Rideau Valley Conservation Authority (on behalf of Quinte, Cataraqui, Mississippi Valley and Rideau Valley)	2,660 property owners within vulnerable areas targeted by four conservation authorities through direct mailing campaign, one-on-one visits, installation of drinking water source protection signs, 13 open houses, news releases, public service announcements.
Saugeen Valley Conservation Authority for the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region	Direct mail campaign, one-on-one visits with property owners, website upgrades, six seminars across the region.
Sault Ste Marie Conservation Authority	Print materials (signs, brochures), one- on-one site visits.
2007/08 Recipients	Education and Outreach – Project Overviews
St. Lawrence River Institute of Environmental Sciences	Education program for secondary school students on source water protection.
Toronto and Region Conservation Authority on behalf of the Source Protection Region	One-on-one contact with property owners, workshop.
Upper Thames River Conservation Authority on behalf of Thames- Sydenham Source Protection Region	Direct mail to property owners, eight workshops.

2008/09 Recipients	Education and Outreach – Project Overviews
Conservation Ontario	Development of information toolkit to be used by conservation authorities in education and outreach on the Clean Water Act and the Ontario Drinking Water Stewardship Program.
City of Timmins	Education and outreach in the Mattagami Region Source Protection Area including posting of signs recognizing the municipal drinking water system vulnerable areas.
St. Lawrence River Institute	Water education program offered to local high school students, including information on the Clean Water Act, source protection and water sampling and analysis.
United Nations Association - Canada	Creation of local youth advisory committees to engage local stakeholders and public on drinking water source protection and put forward a youth advisory statement on drinking water issues.
City of Greater Sudbury	Shoreline demonstration project of erosion control measures at the Science North Centre, on Lake Ramsey.
Conservation Ontario	Funding for students and environmental non-governmental organization representatives to attend the Latonell conservation Symposium.
Oxford County	Oxford Children's Water Festival.
Regional Municipality of Peel	Education and outreach on drinking water source protection in the Town of Caledon.
2008/09 Recipients	Education and Outreach – Project Overviews
University of Guelph	Education and outreach in local area, displays and/or presentations at 25 agricultural events, media coverage, yellow fish road project.

Municipality of Central Elgin	Education and outreach – focus on non residential users of municipal drinking water, including seasonal residents and marina users (Port Stanley).
Sydenham Field Naturalists	Chatham-Kent Children's Water Festival – funding to do script writing for activity stations related to water.
Mississippi Valley Field Naturalists	Source Protection planning for Grade 8 Students (targeting seven schools within municipal drinking water system vulnerable areas).
Bruce Davidson (Concerned Walkerton Citizens)	Presentations to Source Protection Committees and stakeholder groups across the province.
Grey Bruce Health Unit	Education and outreach in local Source Protection Region focusing on agricultural stakeholders, adults, children and youth, commercial and business sector, and adult property owners.
Ladies of the Lake	Development of 20 films related to Lake Simcoe water issues, an eight week film school.

2009/10 Recipients	Education and Outreach – Project Overviews
Canadian Institute for Environmental Law and Policy	Engaging small businesses and households located in urban intake protection zones in the source water protection process.
City of Guelph	Educating local residents about how they can help protect drinking water sources.
City of Hamilton	Providing information and outreach to septic contractors and landowners living near municipal wells about how they can help protect drinking water sources.

2009/10 Recipients	Education and Outreach – Project Overviews
Conservation Ontario	Hosting 20 environmental non-governmental organizations at the Latonell Symposium 2010, to network with environmental practitioners and policy makers and attend sessions that build their knowledge of protecting water.
Essex Region Conservation Authority	Educating and involving local municipalities, emergency planners, residents and local businesses near municipal drinking water intakes in Essex Region on drinking water source protection.
Lake Simcoe Region Conservation Authority	Education and outreach to local residents about how they can help protect drinking water sources.
Municipality of Central Elgin	The municipality is providing outreach in the first and second Intake Protection Zones (IPZ-1 and 2) to residents and students; hosting a spills prevention workshop with the business community; and hosting a display at the International Plowing Match.
Nickel District Conservation Authority	Educating local residents about how they can help protect drinking water sources.
Otonabee Region Conservation Authority	Educating local youth and the community about how they can help protect drinking water sources.
Raisin Region Conservation Authority	Educating local boaters about how they can help protect drinking water sources.
St. Lawrence River Institute of Environmental Sciences	Educating local high school students and community groups about the importance of protecting drinking water sources.
York Region	Education and outreach to local businesses about how they can help protect drinking water sources.

Early Actions

Between 2007 and 2010, the ministry provided funding to help Ontario property owners, farmers, and small to medium-sized businesses implement best management practices for drinking water source protection. Funding was delivered through local funding administrators, including conservation authorities, and the Ontario Federation of Agriculture in partnership with the Ontario Soil and Crop Improvement Association. The best management practices involved:

- decommissioning old abandoned wells and upgrades to existing wells
- septic systems education, upgrades and inspections
- pollution prevention reviews, and
- runoff and erosion protection measures.

2007/08 Recipients Early Actions
Funding for best management practices implementation (local delivery)
Ausable-Bayfield Conservation Authority
Cataraqui Region Conservation Authority
Essex Region Conservation Authority
Grand River Conservation Authority
Conservation Halton
Lake Simcoe Region Conservation Authority
Lower Trent Region Conservation Authority
Moira River (Quinte) Conservation Authority
Niagara Peninsula Conservation Authority
Nickel District Conservation Authority
North Bay-Mattawa Conservation Authority
Ontario Federation of Agriculture
Raisin Region Conservation Authority
Rideau Valley Conservation Authority
Saugeen Valley Conservation Authority
Sault Ste. Marie Conversation Authority
Toronto and Region Conservation Authority
Upper Thames River Conservation Authority

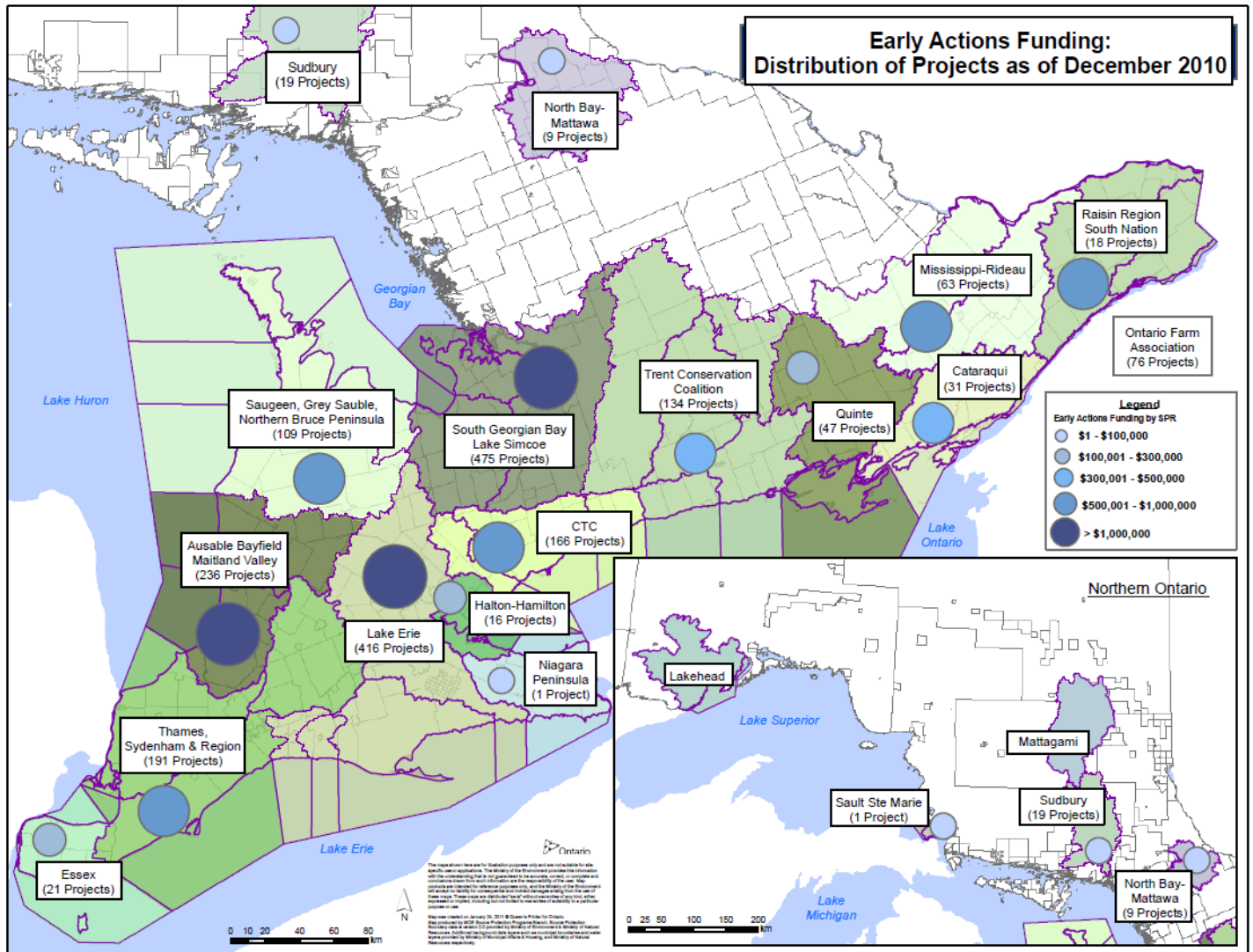
2008/09 Recipients Early Actions
Funding for best management practices implementation (local delivery)
Essex Region Conservation Authority
Quinte Conservation
Raisin Region Conservation Authority
Cataraqui Region Conservation Authority
Ausable-Bayfield Conservation Authority

Lake Simcoe Region Conservation Authority

2009/10 Recipients Early Actions
Funding for best management practices implementation (local delivery)
Ausable Bayfield Conservation Authority
Cataraqui Region Conservation Authority
Conservation Halton
Essex Region Conservation Authority
Grand River Conservation Authority
Lower Trent Conservation Authority
Mississippi Rideau Valley Conservation Authority
Nickel District Conservation Authority
North Bay Mattawa Conservation Authority
Nottawasaga Valley Conservation Authority
Ontario Federation of Agriculture
Quinte Conservation
Saugeen Conservation Authority
Toronto and Region Conservation Authority
Upper Thames River Conservation Authority

Summary of Early Actions projects

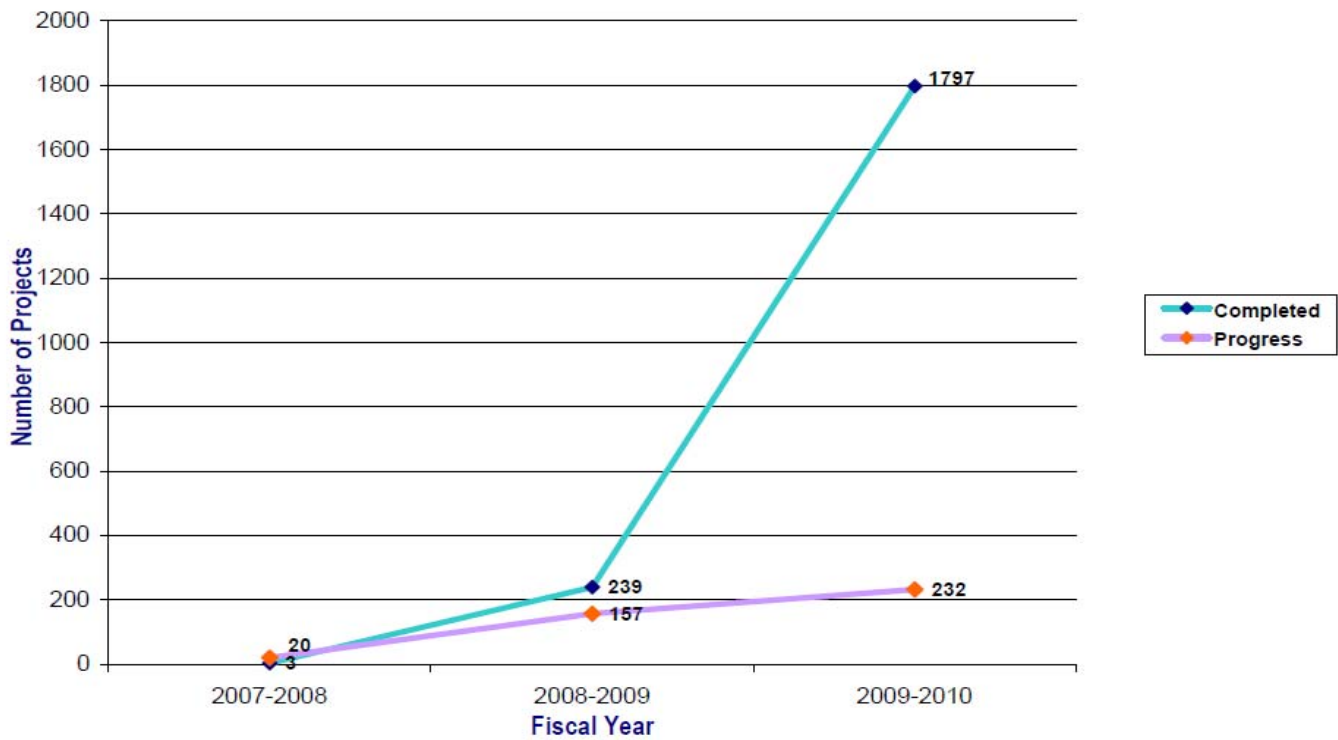
Map: Ministry funding to local administrators for Early Actions projects as of December 31, 2010.



Graph: Early Actions projects funded by local administrators as of December 31, 2010

- 1797 local projects completed
- 232 projects in the process of being completed

Early Actions Component Summary 2007-2010



Ontario Drinking Water Stewardship Program Year Four

In its fourth year, the Ontario Drinking Water Stewardship Program has undergone a strategic shift. The original intent of the program has begun to be realized as financial assistance is being provided to individuals and business affected by the act, who began to be identified through the development of local assessment reports.

In 2010-2011 the Ontario Drinking Water Stewardship Program was made up of two components, Early Response and Special Projects.

Early Response

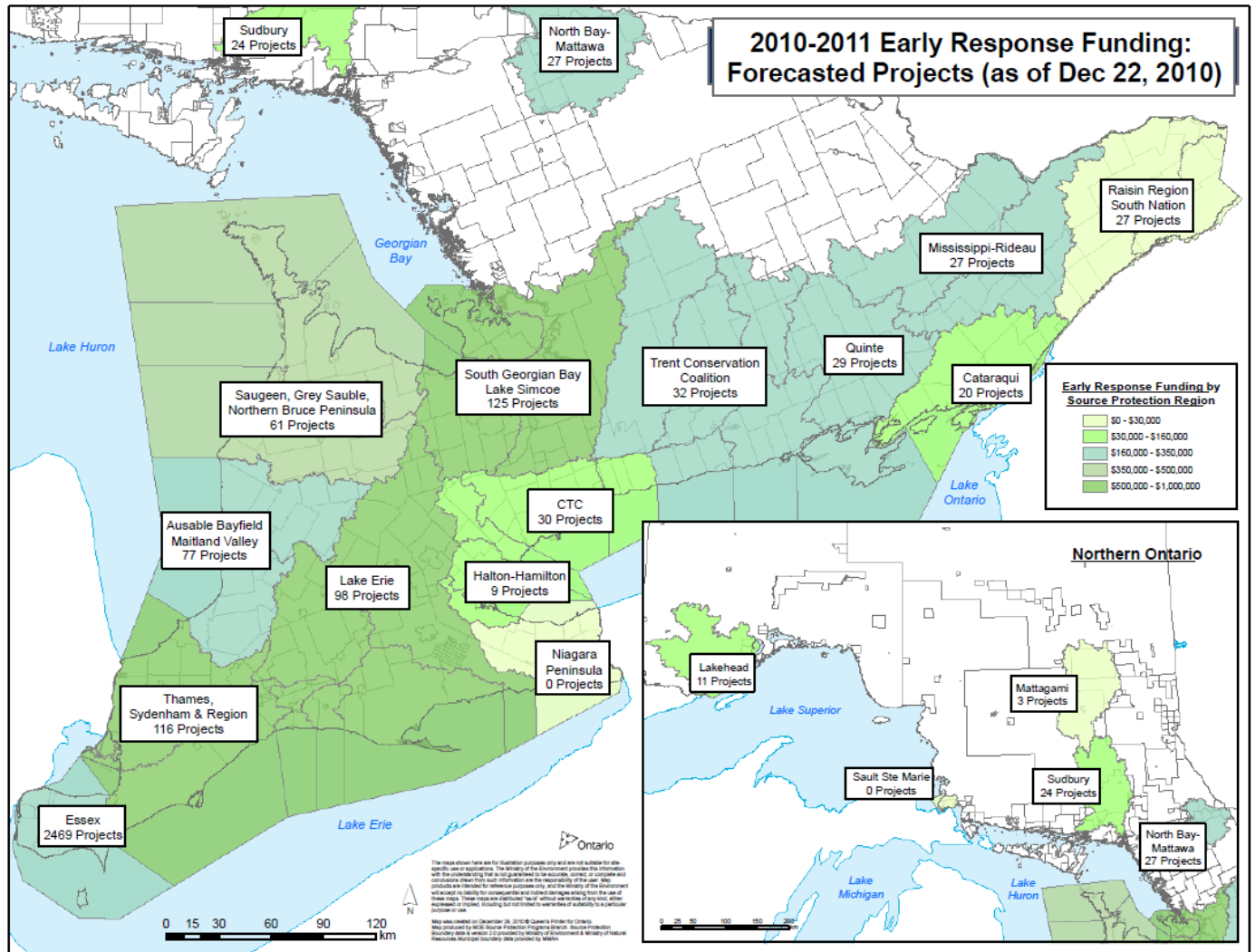
This component of the Ontario Drinking Water Stewardship Program, introduced in year four, is similar to Early Actions of previous years, in that the ministry provided funding to lead conservation authorities to deliver financial assistance locally to landowners who volunteer to carry out:

- Projects or activities to address significant drinking water threats or transport pathways that increase vulnerability scores identified in local assessment reports; or
- Interim Risk Management Plans negotiated between landowners and municipalities.

2010/11 Recipients Early Response
Funding for addressing threats to drinking water sources (local delivery)
Ausable Bayfield Conservation Authority
Cataraqui Region Conservation Authority
Essex Region Conservation Authority
Grand River Conservation Authority
Conservation Halton
Lake Simcoe Region Conservation Authority
Lakehead Region Conservation Authority
Lower Trent Conservation Authority
Mattagami Region Conservation Authority
Nickel District Conservation Authority
North Bay-Mattawa Conservation Authority
Quinte Conservation
Raisin Region Conservation Authority
Rideau Valley Conservation Authority
Saugeen Valley Conservation Authority
Toronto and Region Conservation Authority
Upper Thames River Conservation Authority

Summary of Early Response Projects

Map: Ministry funding to local administrators for Early Response Projects



Special Projects

In 2010/11 the ministry provided financial assistance under the Ontario Drinking Water Stewardship Program for Special Projects including:

- Early Response type activities over \$100,000 in value, and
- Municipal land securement projects, providing financial assistance to municipalities for purchasing land within the 100 metre radius, the most vulnerable area, of their municipal wellhead. This would allow the municipality to directly manage the land and control the activities on it to protect the municipal source of drinking water.

2010/11 Special Projects Recipients Funding for Early Response type activities	
Village of Merrickville-Wolford	Deepening well casings of three municipal wells by extending the solid top portion of the well below the bottom of a shallow aquifer into a deep aquifer, ensuring that water entering the well is drawn entirely from the deep aquifer.
Municipality of North Grenville	Deepening well casings of three municipal wells by extending the solid top portion of the well below the bottom of a shallow aquifer into a deep aquifer, so that the screened portion of the well, where water enters, is located entirely in the deep aquifer.
City of Guelph	Upgrades to a municipal waterworks fueling station located in a vulnerable WHPA-B zone as the existing underground storage tanks constitute a significant drinking water threat to a nearby by municipal well. As part of the project, the existing underground storage tanks will be replaced with an above-ground storage system to minimize this threat.

2010/11 Special Projects Recipients Funding for Land Securement activities
Under the ODWSP 2010-2011, six municipal land securement initiatives were provided funding. Due to the confidential nature of the activities involved in negotiating land purchases, the specific recipients are not identified by the ministry.